

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

- 1-41. (Canceled)
42. (Currently amended) A method for determining whether a test colon cell ~~from a given tissue~~ has an ~~inflammatory bowel disease (IBD) or pre-IBD~~ ulcerative colitis (UC) or Crohn's disease (CD) phenotype, said method comprising:
- (a) determining an expression level of a macrophage inflammatory protein-2 β (GRO3) gene product~~[[,]]~~ in said test colon cell;
- (b) determining an expression level of a neutrophil lipocalin (HNL) gene product~~[[,]]~~ in said test colon cell;
- (c) determining an expression level of a macrophage elastase (MMP-12) gene product~~[[,]]~~ in said test colon cell;
- (d) determining an expression level of an elastase specific inhibitor (elafin) gene product~~[[, and]]~~ in said test colon cell;
- (e) determining an expression level of a type VI collagen α 3 chain (COL6A3) gene product in said test colon cell;
- ~~[[b)]~~ (f) comparing the expression level of each of said gene products in said test colon cell to an expression level of the same gene product in a ~~control~~ normal colon cell ~~of the given tissue type; [[and]]~~
- ~~[[c)]~~ (g) associating ~~a difference~~ an increase in the expression level of ~~at least one of said gene products~~ said GRO3 gene product, said HNL gene product, said MMP-12 gene product, said elafin gene product, or said COL6A3 gene product in said test colon cell ~~[[from]]~~ relative to the expression level of the same gene product in said ~~control~~ normal colon cell with ~~an IBD or pre-IBD~~ a UC phenotype in said test colon cell; and

22 (h) associating an increase in the expression level of said MMP-12 gene product or said
23 elafin gene product in said test colon cell relative to the expression level of the same gene
24 product in said normal colon cell with a CD phenotype in said test colon cell.

1 43. (Canceled)

1 44. (Canceled)

1 45. (Currently amended) The method of claim 42, comprising distinguishing
2 between a UC ~~[[and]]~~ or CD phenotype in said test colon cell.

1 46. (Currently amended) The method of claim 42, wherein the expression
2 level of ~~at least one of said gene products differs from~~ said GRO3 gene product in said test
3 colon cell is increased relative to the expression level of the same gene product in said ~~control~~
4 normal colon cell by at least a factor of two.

1 47. (Currently amended) The method of claim 42, wherein said test colon cell
2 is obtained from a needle biopsy core, a surgical resection sample, or a bowel sample, ~~lymph~~
3 ~~node tissue, or serum.~~

1 48. (Previously presented) The method of claim 42, wherein the expression
2 level of said gene products is determined using Northern blot analysis, reverse transcription-
3 polymerase chain reaction, in situ hybridization, or an array.

1 49. (Previously presented) The method of claim 48, wherein said array
2 comprises:

3 (a) nucleic acid probes of 12-40 nucleotides in length, wherein said nucleic acid probes
4 are complementary to said gene products and hybridize under high stringency conditions to said
5 gene products; and

6 (b) a substrate to which said nucleic acid probes are bound.

1 50. (Previously presented) The method of claim 49, wherein said substrate is
2 selected from the group consisting of paper, membranes, filters, chips, pins, and glass.

1 51. (Previously presented) The method of claim 49, wherein said nucleic acid
2 probes are bound to said substrate by covalent bonds or hydrophobic interactions.

1 52. (Previously presented) The method of claim 49, wherein said nucleic acid
2 probes are spotted onto said substrate in a two-dimensional matrix or array.

1 53. (New) The method of claim 42, wherein the expression level of said HNL
2 gene product in said test colon cell is increased relative to the expression level of the same gene
3 product in said normal colon cell by at least a factor of two.

1 54. (New) The method of claim 42, wherein the expression level of said
2 MMP-12 gene product in said test colon cell is increased relative to the expression level of the
3 same gene product in said normal colon cell by at least a factor of two.

1 55. (New) The method of claim 42, wherein the expression level of said
2 elafin gene product in said test colon cell is increased relative to the expression level of the same
3 gene product in said normal colon cell by at least a factor of two.

1 56. (New) The method of claim 42, wherein the expression level of said
2 COL6A3 gene product in said test colon cell is increased relative to the expression level of the
3 same gene product in said normal colon cell by at least a factor of two.